Work Order ID 103018

June-12-13 9:25:20 AM

103018

Item ID:	D2620	**Accept**	*N900040100*
Revision ID:			
Item Name:	Skidtube, 206 Skidtube		
Start Date:	7/15/13	**Start Qty:** 4.00	*4*
Required Date:	7/15/13	**Req'd Qty:** 4.00	*4*
Reference:			

Setup Start *NS1* Stop *NS2*

Cust Item ID:

Customer:

Run Start *NR1* Stop *NR2*

Approvals: **Process Plan:** MF **Date:** 13-6-13 **Tooling:** ______ **Date:** ______

QC: ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp

Draw Nbr	Revision Nbr
D2620	Rev B

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Notes
100 *100* Skidtubes Skidtubes	Skidtubes	0.00	
	Memo 1-Bend extrusion as per Dwg D2620 using CNC Bending Machine program 206.A and Folio Ft008 2- Cut Fwd end of tube as per Dwg D2620	0.00	– DC 13/06/19 (4)
110 *110* QC Quality Control	QC5- Inspect part completeness to step on W/O	0.00	
	Memo	0.00	[signature] 13-6-19 (4)

DQA: ________ Date: ________

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date: Work Order update only ☐

Work Order: ________	DISPOSITION	AGAINST DEPARTMENT/PROCESS			
Part No. ________	Rework ☐	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
	Scrap ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
	Use-as-is ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
NCR No. ________	Suspected Unapproved ☐	Large Fab ☐	Composite ☐	Supplier ☐	☐

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear	General			
☐ Bending	☐ Bend	☐ Folio/Program	☐ Outside Dimensions	☐ Pressure/Forced
☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance	☐ Set-up
☐ Cracks	☐ Broken/Damage/Defect	☐ Hardware	☐ Part Incorrect	☐ Temperature/Cure
☐ Crimp/Kink/Ripple/Wave	☐ Burrs	☐ Inspection Incomplete/Unqualified	☐ Part Lost/Missing	☐ Weld
☐ Cuffs	☐ Contamination	☐ Instructions Incomplete/Unclear	☐ Part Moved	☐ Wrong Stock Pulled
☐ Crushing	☐ Countersink	☐ Misaligned/off center	☐ Positioned Wrong	
☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Power Loss/Surge	☐ Other
☐ Inspection Strip in Tube	☐ Drawing	☐ Misread	________	
☐ Marks/Chatter	☐ Drill Holes	☐ Off-set	________	
☐ Turning Sequence	☐ Finish	☐ Out of Calibration	________	
☐ Wave/Twist in Tube	☐ Fit/Function	☐ Out of Sequence	________	

Work Order ID 103018 *103018*

June-12-13 9:25:20 AM

Item ID: D2620 **Accept** *N900040100* **Setup** **Start** *NS1* **Stop** *NS2*

Revision ID:

Item Name: Skidtube, 206 Skidtube

Start Date: 7/15/13 **Start Qty:** 4.00 *4* **Cust Item ID:**

Required Date: 7/15/13 **Req'd Qty:** 4.00 *4* **Customer:**

Reference:

Run **Start** *NR1* **Stop** *NR2*

Approvals: **Process Plan:** ______ **Date:** ______ **Tooling:** ______ **Date:** ______

QC: ______ **Date:** ______ **SPC (Y/N):** ______ **Date:** ______

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* Packaging Packaging	Identify as per dwg & Stock Location: 46 Memo	0.00 0.00	DP			13-6-19			(4)
130 *130* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00				MCJ 13-06-20			

RR 13-06-20

DQA: ________ Date: ________

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date:

Work Order update only ☐

Work Order: ____________

Part No. ____________

NCR No. ____________

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐
Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐
Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design ☐									
Doc/Data ☐									
Equip/Tooling ☐									
Handling/Pre ☐									
Material ☐									
Operator ☐									
Offset/Setup ☐									
Process ☐									
Supplier ☐									
Training ☐									
Transport ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function

☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence

☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other ____________

Picklist Print

June-12-13 9:25:19 AM

Work Order ID: 103018

Parent Item: D2620

Parent Item Name: Skidtube, 206 Skidtube

Start Date: 7/15/13 **Required Date:** 7/15/13

Start Qty: 4.00 **Required Qty:** 4.00

Comments: IPP D02.07.26Change Dwg to rev.B; Updated LocationRF

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2600-1-160 Extrusion Round 3" 206		Manufactured	No			100	Each	62.0000	1	4			

De 13/06/19

Location		Loc Qty	Loc Code	
LG		62		
	43969	2		
	59875	1		
	68284	2		
	76913	29		4
	90531	28		

DQA: ________ Date: ________

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: Date:

Work Order update only ☐

Work Order: ________

Part No. ________

NCR No. ________

DISPOSITION

- Rework ☐
- Scrap ☐
- Use-as-is ☐
- Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
Large Fab ☐	Composite ☐	Supplier ☐	☐

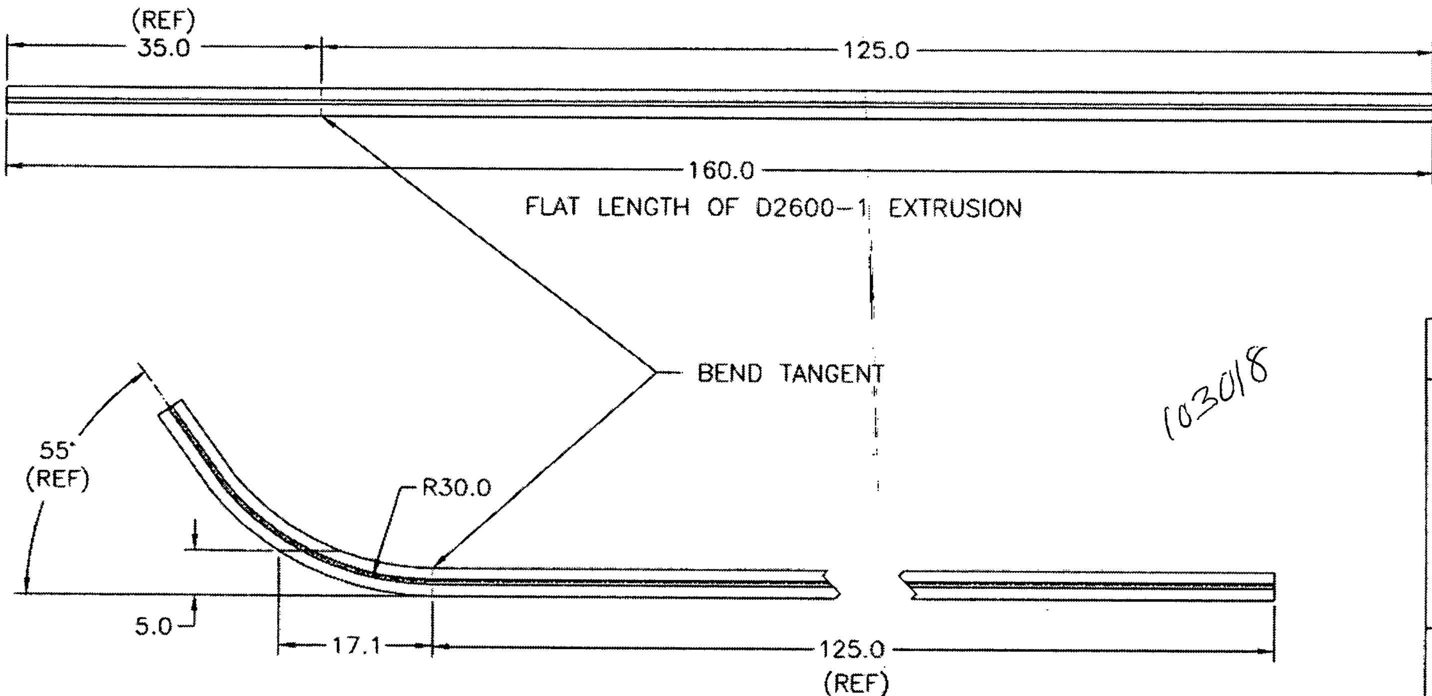
Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design ☐									
Doc/Data ☐									
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Material ☐									
Operator ☐									
Offset/Setup ☐									
Process ☐									
Supplier ☐									
Training ☐									
Transport ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear	General			
☐ Bending	☐ Bend	☐ Folio/Program	☐ Outside Dimensions	☐ Pressure/Forced
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☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Power Loss/Surge	☐ Other
☐ Inspection Strip in Tube	☐ Drawing	☐ Misread		
☐ Marks/Chatter	☐ Drill Holes	☐ Off-set		
☐ Turning Sequence	☐ Finish	☐ Out of Calibration		
☐ Wave/Twist in Tube	☐ Fit/Function	☐ Out of Sequence		

SPECIFICATION CONTROL DRAWING

206 SKIDTUBE BENDING



103018

DAMAGE TOLERANCE

1. THERE SHOULD BE NO VISIBLE WRINKLES BELOW 5.0 AFTER BENDING.
2. GOUGES UP TO 0.020 DEEP ARE ACCEPTABLE IN BENT PORTION OF THE TUBE.
   NO GOUGES ARE ACCEPTABLE IN THE FLAT PORTION OF THE TUBE.
   DEEPER GOUGES ARE ACCEPTABLE IN THE PORTION OF THE TUBE ABOVE 5.0.
3. TUBE WIDTH SHOULD BE 3.20 ± 0.200 IN THE BEND.
   TUBE WIDTH SHOULD BE 3.200 ± 0.010 IN THE FLAT PORTION OF THE TUBE.
4. TUBE HEIGHT SHOULD BE 3.15 ± 0.200 IN THE BEND.
   TUBE HEIGHT SHOULD BE 3.150 ± 0.010 IN THE FLAT PORTION OF THE TUBE.

NOTE: ALL DIMENSIONS ARE IN INCHES

RELEASED 99.09.15

QA COPY ISSUED

DART

DART AEROSPACE USA, INC.
FAIRCHILD INTERNATIONAL AIRPORT, WA

DESIGN	DRAWN BY	DRAWING NO.	REV.
CHECKED	APPROVED	D2620	B
DATE 99.09.10		TITLE 206 SKIDTUBE BENDING CONTROL	SHEET 1 OF 1
			SCALE 1:20

REV	DATE	DESCRIPTION
A	97.11.07	NEW ISSUE
B	97.09.10	UPDATE FOR IN-HOUSE BENDING

DQA: ________ Date: ________

QA Closed: Date:

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

Work Order update only ☐

Work Order: ________ Part No. ________ NCR No. ________	**DISPOSITION** Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	**AGAINST DEPARTMENT/PROCESS** Skid-tube ☐ Crosstube ☐ Water Jet ☐ Engineering ☐ Machining ☐ Small Fab ☐ Prod. Eng. Coor. ☐ Quality ☐ Thermoforming ☐ Finishing ☐ Rec/Store/Packaging ☐ Other ☐ Large Fab ☐ Composite ☐ Supplier ☐ ☐

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Offset/Setup ☐									
Process ☐									
Supplier ☐									
Training ☐									
Transport ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear	**General**			
☐ Bending	☐ Bend	☐ Folio/Program	☐ Outside Dimensions	☐ Pressure/Forced
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